

# Notice of Allowability

Application No.

09/362,982

Examiner

Cristina Owen Sherr

Applicant(s)

TANIGUCHI ET AL.

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's amendment filed 06/26/06.
2. ☒ The allowed claim(s) is/are 1,5-7,16,22 and 26.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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1. This communication is in response to Applicant's Amendment received June 26, 2006. Claim 1 has been amended. Claims 2-4, 8-15, 17-21, and 23-25 have been canceled. Claim 26 is newly added. Claims 1, 5-7, 16, 22 and 26 are currently pending in this case.

***Reasons for Allowance***

2. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The closest prior art of record shows:

(1) A system for locating and communicating with mobile vehicles (Rimes US Patent 5,432,841A);

(2) A method of making the use of a terminal of a cellular mobile radio system more secure, and corresponding terminal and user card (Pinault, US Patent 5,913,175A);

(3) A vehicle information and safety control system (Caci, US Patent 6,154,658A);

(4) A vehicle identification and information system control device and system (Warner, US Patent 5,963,129A);

(5) A vehicle-mounted device and road-to-vehicle communication device (Toyota, Pct/JP98/00342);

(6) Communication equipment to be carried on vehicle and interroad communication equipment (Abstract WO98/34198);

(7) A system, terminal and a method, Pinault, US Patent 5,913,175A

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(7) The Future Generations of Mobile Communications Based on Broadband Access Technologies (Ohmori, S; Yamao, Y; Nakajima, N; IEEE Communications magazine, December 2000);

(8) Hoshino et al (US 6,088,680) disclose an automatic toll adjusting system, and storage medium with a radio communication function, frequency converting apparatus, writing apparatus, settling apparatus, depositing apparatus and inquiring apparatus therefor;

(9) Bragas et al (US 4,251,797) disclose a vehicular direction guidance system, particularly for interchange of information between road mounted units and vehicle mounted equipment;

(10) Kitagawa et al (US 6,282,493) disclose using a stored data in a map information storage section which is a storage medium such as a CD-ROM or the like, a vehicle navigation device comprises a schematic map calculation section which performs calculations of a schematic map of roads, a distance calculation section which calculates a distance from an arbitrary geographical point to a facility, a display selection section which selects a facility within a fixed distance from an arbitrary geographical point based on a calculation result in a distance calculation section, and a display control section which displays facilities selected from the display selection section and a schematic map obtained from the schematic map calculation section on a schematic map on a display section;

(11) Isobe et al (US 6,019,285) disclose an automatic toll charging system communicates by radio between roadside units disposed on each gate of a toll road and

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a vehicle-mounted unit mounted in a vehicle, and automatically charges a toll in a range from an entrance gate to an exit gate. In this system, an IC card is inserted in the vehicle-mounted unit, and payment information recorded in the IC card and entrance information received from a roadside unit, disposed at the entrance gate are recorded in the information recording part of the vehicle-mounted unit. In addition, the entrance information recorded in the information recording part is transmitted to the roadside unit disposed at the exit gate, and a toll payment process is executed. The entrance information is recorded in the IC card as a backup so the toll payment process can be executed even if a function of the vehicle-mounted unit is performed improperly;

(12) Hurta et al (US 5,602,919) discloses a speedup for monetary transactions using a transponder in conjunction with a smartcard;

(13) Jesadanont (US 5,451,758A) discloses an automatic non-computer network no-stop collection of expressway tolls by magnetic cards and method;

(14) Chaum et al (US 5,485,520A) discloses an automatic real-time highway toll collection from moving vehicles;

(15) Shigenaga et al (US 5,554,984A) discloses an electronic traffic tariff reception system and vehicle identification apparatus.

(16) Maeda et al (US 5,926,546A) discloses a communication device and system for mobile encrypted communication.

3. Applicant's set of claims consists of claims 1, 5-7, 16, 22 and 26.

The sole independent claim 1 is directed at a vehicle-mounted communication device comprising: transmitting/receiving means provided for communication of information

of expressway tolls by magnetic cards and method;

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with road- side communication means located at a road side; and relay means for relaying encryption information received from the road side by said transmitting/receiving means to an IC card which includes storage means. Independent claim 1 identifies the uniquely distinct feature of having an information display means that displays non-encrypted information and an encryption information storage means in which encryption information is temporarily stored both of which are in the vehicle-mounted device itself. Because the closest prior art does not appear to teach or suggest the latter feature, independent claim 1 and its dependent claims 5-7, 16, 22 and 26 are deemed allowable.

4. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cristina Owen Sherr whose telephone number is 571-272-6711. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

COS, 09/12/06

 9/14/06

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